## STATEMENT OF BASIS (AI No. 19033)

for draft Louisiana Pollutant Discharge Elimination System permit No. LA0072184 to discharge to waters of the State of Louisiana.

THE APPLICANT IS: Wright Enrichment, Inc.

P.O. Box 1365 Crowley, LA 70526

ISSUING OFFICE: Louisiana Department of Environmental Quality (LDEQ)

Office of Environmental Services

Post Office Box 4313

Baton Rouge, Louisiana 70821-4313

PREPARED BY: Ronda Burtch

DATE PREPARED: April 9, 2010

#### 1. PERMIT STATUS

A. Reason For Permit Action:

Permit reissuance of a Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term

B. NPDES permit - NPDES permit effective date: N/A

NPDES permit expiration date: N/A

EPA has not retained enforcement authority.

C. LPDES permit - LA0072184

LPDES permit effective date: May 1, 2005 LPDES permit expiration date: April 30, 2010

D. Date Application Received: March 22, 2010

#### 2. FACILITY INFORMATION

A. FACILITY TYPE/ACTIVITY - vitamin and mineral blending and rice enrichment

Wright Enrichment, Inc. is an existing vitamin and mineral blending and rice enrichment plant. There is no process wastewater produced at this facility. All blending/enrichment activities are either dry processes or involve waxes. The equipment is washed down once per day with detergents, and then sterilized. The discharges from this facility include treated sanitary wastewater, boiler blowdown, washdown wastewater, and stormwater. All sanitary wastewater travels through two (2) consecutive septic tanks, then to a 3-cell oxidation pond. Intermittent boiler blowdown, washdown wastewater, and stormwater are collected in sump drains, then pumped into the 3-cell oxidation pond.

## B. FEE RATE

- 1. Fee Rating Facility Type: minor
- 2. Complexity Type: I (The SIC Code 2044 is assigned a complexity of II in LAC 33.IX.1319. However, since this facility does not discharge process wastewater, it has been BPJ'd to a complexity of I.)
- 3. Wastewater Type: III
- 4. SIC code: 2044
- C. LOCATION 6428 Airport Road in Crowley, Acadia Parish Latitude 30° 09' 50", Longitude 92° 24' 15"

#### 3. OUTFALL INFORMATION

## Outfall 001

Discharge Type: treated sanitary wastewater, intermittent boiler blowdown, washdown water, and stormwater

Treatment: sanitary wastewater is treated by two (2) consecutive septic tanks and then is pumped into a 3-cell oxidation pond. The boiler blowdown, washdown wastewater, and stormwater is collected in sump drains and pumped to the 3-cell oxidation pond for treatment

Location: at the point of discharge from the 3-cell oxidation pond, prior to mixing with other waters Flow: 1,000 GPD

Discharge Route: unnamed ditch, thence into local drainage, thence into Bayou Plaquemine Brule

#### 4. RECEIVING WATERS

STREAM - unnamed ditch, thence into local drainage, thence into Bayou Plaquemine Brule

BASIN AND SEGMENT - Mermentau River Basin, Segment 050201

DESIGNATED USES - a. primary contact recreation

b. secondary contact recreationc. propagation of fish and wildlife

f. agriculture

#### 5. TMDL STATUS

Subsegment 050201, Bayou Plaquemine Brule-From headwaters to Bayou Des Cannes, is not listed on LDEQ's Final 2006 303(d) list as impaired. However, subsegment 050201 was previously listed as impaired for mercury, phosphorus, organic enrichment/low DO, pathogen indicators, turbidity, suspended solids/turbidity/siltation, TDS, ammonia, and Fipronil, for which the below TMDLs have been developed. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional TMDL's and/or water quality studies. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDLs for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as necessary to achieve compliance with water quality standards.

The following TMDL's have been established for subsegment 050201:

## Mercury TMDLs for Subsegments within Mermentau and Vermilion-Tech River Basins

Mercury TMDLs for Subsegments within Mermentau and Vermilion-Tech River Basins was finalized on January 19, 2001. Per the TMDL, "Point source loading of mercury into waters of the Mermentau and Vermilion-Teche basins is relatively small, approximately 0.6% and 1.5% of existing total loads for the Mermentau and Vermilion-Teche basins, respectively. On a watershed scale these point sources are expected to have a relatively minor effect. However, some point sources, particularly larger discharges into small water bodies may represent significant site specific (local) sources of mercury which could contribute to mercury bioaccumulation. The implementation plan will identify point source discharges which, individually or collectively, may represent significant sources of mercury. Those facilities identified as having reasonable potential for exceeding narrative and/or numeric standards for protection of human health will be required to monitor mercury in their discharges. Mercury loading for these facilities will be controlled through permit limits or through implementation of a mercury minimization plan." Since this facility has not been identified as a point source discharge that could potential discharge mercury, no limitations for mercury will be required of this facility.

# <u>Bayou Plaquemine Brule Watershed TMDL to Address Dissolved Oxygen and Nutrients Including Eight</u> Point Source Wasteload Allocations and a Watershed Nonpoint Source Load Allocation

The Bayou Plaquemine Brule Watershed TMDL to Address Dissolved Oxygen and Nutrients Including Eight Point Source Wasteload Allocations and a Watershed Nonpoint Source Load Allocation was finalized on March 26, 1999. Per the TMDL, "There are 66 known dischargers in subsegment 0502, the majority of which are too small to have significant impact on the watershed model. Limits for these small facilities are generally set by state policy." Since this facility was not mentioned in the TMDL for requiring a DO limit and due to the small amount of discharge from this facility, no DO limitations will be included in this permit. Although, no DO limitation was required of this facility, compliance with the CBOD<sub>5</sub> limitations placed in this permit should help protect the stream from further impairment.

## Bayou Plaquemine Brule TMDL for Fecal Coliform

The Bayou Plaquemine Brule TMDL for Fecal Coliform was finalized on January 19, 2001. This TMDL applies to sanitary dischargers only. As per the TMDL, "...there will be no change in the permit requirements based upon a wasteload allocation resulting from this TMDL." Therefore, Fecal Coliform effluent limitations will remain as previously permitted.

## TMDL for TSS, Turbidity, and Siltation for the Mermentau River Basin

The TMDL for TSS, Turbidity, and Siltation for the Mermentau River Basin was finalized on May 3, 2001. As per the TMDL, "Point source loads are so small as to be insignificant, and because effective policies are in place to limit TSS discharges, no specific reductions from point sources are required." Therefore, TSS limits will remain as previously permitted.

# Bayou Plaquemine Brule TMDL for Total Dissolved Solids (TDS)

The Bayou Plaquemine Brule TMDL for Total Dissolved Solids (TDS) was finalized on April 17, 2003. Per the TMDL, "The Bayou Plaquemine watershed includes 66 known dischargers, according to LDEQ's permit tracking system (Berger et al., 1999). Many of these dischargers are small and/or adequately distant from Bayou Plaquemine Brule and assumed to have a minimal effect on water quality in this subsegment. Sixteen larger facilities discharging sanitary wastewater directly into Bayou Plaquemine Brule and its tributaries were

specifically included in this model." Wright Enrichment, Inc. was included in this TMDL. Therefore, per the TMDL, "The Louisiana Water Quality Regulations require point source discharges of treated sanitary wastewater to maintain in-stream TDS water quality standards of 260 mg/l on this subsegment. Therefore, there will be a need to include TDS limits as the permit requirements based upon a wasteload allocation resulting from this TMDL." Therefore, a TDS limit is being included in the permit. Since all TMDLs have to be implemented within 6 years of finalization, there will be no interim period for this facility to meet the TDS limitation included in the permit.

## Bayou Plaquemine Brule TMDL for Ammonia

The Bayou Plaquemine Brule TMDL for Ammonia was finalized on May 3, 2001. Wright Enrichment, Inc. was included in this TMDL. A limitation of 15 mg/l monthly average for ammonia and 30 mg/l monthly average for CBOD<sub>5</sub> were giving to this facility. Therefore, limitations for NH<sub>3</sub>-N and CBOD<sub>5</sub> will remain as previously permitted.

## Total Maximum Daily Load (TMDL) for the Pesticide Fipronil in the Mermentau Rijver Basin

The Total Maximum Daily Load (TMDL) for the Pesticide Fipronil in the Mermentau River Basin was finalized on March 21, 2002. Per the TMDL, "There are no known point sources for Fipronil in the Mermentau River Basin. Effluent from several hundred other point source dischargers in the Mermentau River Basin is not expected to contain Fipronil because its use is limited to rice farming. Therefore, concentrations of Fipronil in their effluents are not expected and would be considered an enforcement issue and dealt with accordingly."

#### **Phosphorus**

As per the February 29, 2000 Delist (Federal Register Notice: Vol. 65, Num. 173, pages 54032-54034, 9/6/2000), assessment of new data and information shows this segment is meeting water quality standards for Phosphorus. Therefore, requirements for Total Phosphorus will not be placed in this permit.

## **Turbidity**

As per the February 29, 2000 Delist (Federal Register Notice: Vol. 65, Num. 173, pages 54032-54034, 9/6/2000), assessment of new data and information shows this segment is meeting water quality standards for turbidity. Therefore, requirements for Turbidity will not be placed in this permit.

#### 6. CHANGES FROM PREVIOUS PERMIT

- 1. A daily maximum limitation for TDS has been added to the permit based on a TMDL for this subsegment.
- 2. Monthly average limitations for TSS and Fecal Coliform have been added to the permit.

## 7. COMPLIANCE HISTORY/COMMENTS

A. OEC - A review of the files for April 1, 2008 through March 31, 2010 revealed that there are no enforcement actions administered against this facility. There have been no inspections performed at this facility since July 21, 2004.

<sup>\*</sup> This facility was referred to Surveillance on April 8, 2010, due to lack of a recent inspection.

B. DMR Review/Excursions - A review of the DMRs for the period of January 1, 2008 through December 31, 2009, revealed the following excursions:

Date	Parameter	Reported Value	Permit Limits
July - September 2009	TSS, Daily Max	156 mg/l	135 mg/l
October - December 2009	BOD <sub>5</sub> , Monthly Avg.	49 mg/l	45 mg/l
	Fecal Coliform, Daily Max	2,000 col/100 ml	400 col/100 ml
	TSS, Daily Max	230 mg/l	135 mg/l

<sup>\*\*</sup>Please note that this facility had interim report limitations for CBOD<sub>5</sub> and NH<sub>3</sub>-N for the period of May 1, 2005 through April 30, 2008. However, the facility never reported for either parameter. On May 1, 2008, this facility was due to implement the final effluent limitations, which included limitations for CBOD<sub>5</sub> and NH<sub>3</sub>-N and removed BOD<sub>5</sub>. The final effluent limitations were never implemented either. Therefore, this facility was referred to enforcement on April 8, 2010.

## 8. EXISTING EFFLUENT LIMITS

Interim Limits (Expire 3 years from the effective date of the permit)

Pollutant	Limitation				Monitoring
	Monthly	Daily	Monthly	Daily	Frequency
	Avg	Max	Avg	Max	<u> </u>
	lbs/day 1		ng/l	·	
Flow (MGD)	Report	Report			Quarterly
BOD <sub>5</sub>				45	Quarterly
TSS				135	Quarterly
Fecal Coliform (col/100 ml)				400	Quarterly
Oil & Grease				15	Quarterly
CBOD <sub>5</sub>	•••		Report	Report	Semiannually
NH <sub>3</sub> -N			Report	Report	Semiannually
pH (s.u.)			6.0 (min)	9.0 (max)	Quarterly

# Final Effluent Limits (3 years from the permit effective date to permit expiration)

Pollutant	Limitation				Monitoring
	Monthly Avg	Daily Max	Monthly Avg	Daily Max	Frequency
	lbs/day		n	ıg/l	•
Flow (MGD)	Report	Report			Quarterly
CBOD <sub>5</sub>			30	45	Quarterly
TSS				135	Quarterly
Fecal Coliform (col/100 ml)				400	Quarterly
Oil & Grease				15	Quarterly
NH <sub>3</sub> -N			15	22.5	Quarterly
pH (s.u.)			6.0 (min)	9.0 (max)	Quarterly

#### 9. ENDANGERED SPECIES

The receiving waterbody, Subsegment 050201 of the Mermentau River Basin is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U.S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated January 5, 2010 from Rieck (FWS) to Nolan (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat. Therefore, the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat.

#### 10. HISTORIC SITES

The discharge is from an existing facility location, which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

#### 11. TENTATIVE DETERMINATION

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to issue a permit for the discharge described in the application.

#### 12. PUBLIC NOTICES

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

## Rationale for Wright Enrichment, Inc.

1. Outfall 001 - treated sanitary wastewater, intermittent boiler blowdown, washdown water, and stormwater (estimated flow is 1,000 GPD)

Pollutant	Limitation				Reference
	Monthly	Daily	Monthly	Daily	
	Avg	Max	Avg	Max	
	lbs/c	lay	mg/l		
Flow (MGD)	Report	Report			LAC 33.IX.2707.I.1.b
CBOD <sub>5</sub>		***	30	45	TMDL; Previous permit
TSS		•	90	135	LAG530000; Previous permit
Fecal Coliform (col/100 ml)			200	400	LAG530000; Previous permit
Oil & Grease				15	LAG530000; Previous permit
NH <sub>3</sub> -N			15	22.5	TMDL; previous permit
TDS	***		260		TMDL
pH (s.u.)			6.0 (min)	9.0 (max)	LAG530000; Previous permit

Treatment: Sanitary wastewater is treated by two (2) consecutive septic tanks and then is pumped into a 3-cell oxidation pond. Boiler blowdown, washdown water, and stormwater is collected in sump drains and pumped into a 3-cell oxidation pond for treatment.

Monitoring Frequency: 1/quarter for all parameters

#### **Limits Justification:**

Flow - Flow reporting is based on LAC 33.IX.2707.I.1.b.

<u>CBOD</u><sub>5</sub> - The CBOD<sub>5</sub> limitations are based on the previous permit and the *Bayou Plaquemine Brule TMDL for Ammonia*, which was finalized on May 3, 2001.

TSS – A monthly average limitation for TSS has been added to the permit. The TSS limits for oxidation ponds are 90 mg/l monthly average and 135 mg/l daily max. The TSS limitations are based on the previous permit and the Class I Sanitary Discharge General Permit, LAG530000 effective December 1, 2007.

<u>Fecal Coliform</u> – A monthly average limitation of 200 colonies/100 ml has been added to the permit. Monthly average and daily max fecal coliform limitations are based on the previous permit and the Class I Sanitary Discharge General Permit, LAG530000 effective December 1, 2007.

Oil & Grease – The oil and grease limitation is based on the previous permit and the Class I Sanitary Discharge General Permit, LAG530000 effective December 1, 2007.

<u>NH<sub>3</sub>-N</u> - The NH<sub>3</sub>-N limitations are based on the previous permit and the *Bayou Plaquemine Brule TMDL for Ammonia*, which was finalized on May 3, 2001.

TDS - The TDS limitation is based on the wasteload allocation given to this facility in the Bayou Plaquemine Brule TMDL for Total Dissolved Solids (TDS) was finalized on April 17, 2003

<u>pH</u> - pH limitations are based on the previous permit and the Class I Sanitary Discharge General Permit, LAG530000 effective December 1, 2007.

## s.u. Standard Units

#### NOTE

For outfalls containing concentration limits, the usage of concentration limits is based on BPJ for similar outfalls since the flow is variable and estimated.

# STORM WATER POLLUTION PREVENTION PLAN (SWP3) REQUIREMENT

A SWP3 is included in the permit because in accordance with LAC 33:IX.2511.A.1, storm water discharges shall not be required to obtain an LPDES permit "... except... discharges associated with industrial activity." In accordance with LAC 33:IX.2511.B.14.a-k, facilities classified as SIC code 2044 are considered to have storm water discharges associated with industrial activity.

For first time permit issuance, the SWP3 shall be prepared, implemented, and maintained within six (6) months of the effective date of the final permit. For renewal permit issuance, the SWP3 shall be reviewed and updated, if necessary, within six (6) months of the effective date of the final permit. The plan should identify potential sources of storm water pollution and ensure the implementation of practices to prevent and reduce pollutants in storm water discharges associated with industrial activity at the facility (see Narrative Requirements for the AI).